

I claim:

1. A side-protective head restraint pad, comprising an air bladder positioned adjacent a side wall of a child safety seat in lateral alignment with one side of the head of an occupant and inflatable or deflatable as appropriate to restrain the head against injurious lateral movement caused by a side impact relative to the seat.

2. A side-protective head restraint pad, comprising:

(a) an air bladder, including a pump for selectively inflating the air bladder and a release valve for selectively deflating the air bladder;

(b) an energy-absorbing component;

(c) a comfort component;

(d) the air bladder, energy-absorbing component and comfort component being positioned in overlaid configuration to define a unit;

(e) the head restraint pad adapted for being placed in a seat in lateral alignment with one side of the head of an occupant and inflatable or deflatable as appropriate to restrain the head against injurious lateral movement caused by a side impact relative to the seat.

3. A side-protective head restraint pad according to claim 2, and including a flexible container within which the energy-absorbing component is positioned, the energy-absorbing component being sandwiched between the air bladder and the comfort component, and a comfort component side of the head restraint pad being adapted for being placed adjacent the head of an occupant.

4. A side-protective head restraint pad according to claim 2, wherein the energy-absorbing component is sandwiched between the air bladder and the comfort component, a comfort component side of the head restraint pad being adapted for being placed in a seat adjacent one side of the head of an occupant, and further wherein the energy absorbing component is formed of semi-rigid, compressible foam and the comfort component is formed of a soft, compressible foam.

5. A side-protective head restraint pad according to claim 2, wherein the pad includes a stiff support positioned on a side of the air bladder remote from the energy-absorbing component for providing shaping and support to the restraint pad.

6. A side-protective head restraint assembly, comprising a U-shaped air bladder defining a pair of opposed pads for being positioned adjacent respective opposing side walls of a child safety seat in lateral alignment with the lateral sides of the head of an occupant and inflatable or deflatable as appropriate to restrain the head against injurious lateral movement caused by a side impact relative to the seat.

7. A side-protective head restraint assembly, comprising:

- (a) an air bladder, including a pump for selectively inflating the air bladder and a release valve for selectively deflating the air bladder;
- (b) an energy-absorbing component;
- (c) a comfort component; and

(d) retention means for retaining the air bladder, energy-absorbing component and comfort component in an overlaid configuration relative to each other to define a unit;

(e) the air bladder, energy-absorbing component and comfort component and enclosure collectively defining a pair of head restraining pads for being positioned in a generally U-shaped configuration in a seat with the pair of head restraining pads adjacent opposing sides of the head of the seat occupant, and selectively inflatable and deflatable as appropriate to restrain the head against injurious lateral movement caused by a side impact relative to the seat.

8. A head restraint assembly according to claim 7, wherein the energy-absorbing component is sandwiched between the air bladder and the comfort component, and the comfort component is adapted for being placed nearest the head of the seat occupant.

9. A head restraint assembly according to claim 7, wherein the energy absorbing component is formed of semi-rigid, compressible foam; the comfort component is formed of a soft, compressible foam; and the enclosure is formed of a fabric.

10. A head restraint assembly according to claim 7, wherein the pad includes a stiff support positioned on a side of the air bladder remote from the energy-absorbing component for providing shaping and support to the restraint pad.

11. A head restraint assembly according to claim 7, and including an attachment component carried by the pad for attaching the pad to the seat.

12. A head restraint assembly according to claim 7, wherein the semi-rigid energy-absorbing component comprises a pair of foam blocks.

13. A head restraint assembly according to claim 7, wherein the foam blocks are downwardly-tapered provide a head restraint assembly that is relatively thick adjacent an cranial portion of the head and relatively less thick adjacent the jaw portion of the head.

14. A child safety seat with an adjustable head restraint, comprising:

- (a) a shell defining a generally rigid, concave integral seat bottom and seat back;
- (b) seat padding covering the seat bottom and seat back for providing a comfortable seating surface for a seat occupant;
- (c) attachment means carried by the shell for attachment of the shell to a support; and
- (d) a side-protective head restraint assembly, comprising an air bladder defining a pair of opposed pads for being positioned in a U-shaped configuration adjacent respective opposing side walls of a child safety seat in lateral alignment with the lateral sides of the head of an occupant and inflatable or deflatable as appropriate to restrain the head against injurious lateral movement caused by a side impact relative to the seat.

15. A child safety seat with an adjustable head restraint, comprising:

- (a) a shell defining a generally rigid, concave integral seat bottom and seat back;
- (b) seat padding covering the seat bottom and seat back for providing a comfortable seating surface for a seat occupant;
- (c) attachment means carried by the shell for attachment of the shell to a support; and
- (d) a side-protective head restraint assembly, comprising:
  - (i) an air bladder, including a pump for selectively inflating the air bladder and a release valve for selectively deflating the air bladder;
  - (ii) an energy-absorbing component;
  - (iii) a comfort component;
  - (iv) a flexible enclosure within which the air bladder, energy-absorbing component and comfort component are positioned in overlaid configuration to define a unit;
  - (v) the air bladder, energy-absorbing component and comfort component and flexible enclosure collectively defining a pair of head restraining pads for being positioned in a generally U-shaped configuration on the seat back with the pair of head restraining pads adjacent opposing sides of the head of the seat occupant, and selectively inflatable and deflatable to restrain injurious lateral movement of the head of the seat occupant caused by a side impact relative to the seat.

16. A safety seat according to claim 15, wherein the energy-absorbing component is sandwiched between the air bladder and the comfort component, and the comfort component is adapted for being placed nearest the head of the seat occupant.

17. A safety seat according to claim 15, wherein the energy absorbing component is formed of semi-rigid, compressible foam; the comfort component is formed of a soft, compressible foam; and the enclosure is formed of a fabric.

18. A safety seat according to claim 15, wherein the pad includes a stiff support positioned on a side of the air bladder remote from the energy-absorbing component for providing shaping and support to the restraint pad.

19. A safety seat according to claim 15, and including an attachment component carried by the pad for attaching the pad to the seat back.

20. A safety seat according to claim 15, wherein the semi-rigid energy-absorbing component comprises a pair of foam blocks.